

Pelargonic Acid (217500) Fact Sheet

Summary

Pelargonic acid is present in many plants. It is used as an herbicide to prevent growth of weeds both indoors and outdoors, and as a blossom thinner for apple and pear trees. The U.S. Food and Drug Administration (FDA) has approved this substance for use in food. No risks to humans or the environment are expected when pesticide products containing pelargonic acid are used according to the label directions.

I. Description of the Active Ingredient

Pelargonic acid is a chemical substance that is found in almost all species of animals and plants. Because it contains nine carbon atoms, it is also called nonanoic acid. It is found at low levels in many of the common foods we eat. It is readily broken down in the environment.

II. Use Sites, Target Pests, And Application Methods

Pelargonic acid has two distinct uses related to plants: weed killer and blossom thinner.

[*Note:* The substance can also be used as a sanitizer, a use not addressed in this Fact Sheet.]

- **Weed killer** Growers spray pelargonic acid on food crops and other crops to protect them against weeds. For food crops, pelargonic acid is allowed to be applied from planting time until 24 hours before harvest. The pre-harvest restriction assures that little or no residue remains on the food. The chemical also controls weeds at sites such as schools, golf courses, walkways, greenhouses, and various indoor sites.
- **Blossom thinner** Growers use pelargonic acid to thin blossoms, a procedure that increases the quality and yield of apples and other fruit trees. Thinning the blossoms allows the trees to produce fruit every year instead of every other year.

III. Assessing Risks to Human Health

Pelargonic acid occurs naturally in many plants, including food plants, so most people are regularly exposed to small amounts of this chemical. The use of pelargonic acid as an herbicide or blossom thinner on food crops is not expected to increase human exposure or risk. Furthermore, tests indicate that ingesting or inhaling pelargonic acid in small amounts has no known toxic effects. Pelargonic acid is a skin and eye irritant, and product labels describe precautions that users should follow to prevent the products from getting in their eyes or on their skin.

IV. Assessing Risks to the Environment

Pelargonic acid is not expected to have adverse effects on non-target organisms or the environment. Toxicity tests on non-target organisms, such as birds, fish, and honeybees, revealed little or no toxicity. The chemical decomposes rapidly in both land and water environments, so it does not accumulate. Because pelargonic acid is an herbicide, it could harm non-target plants if pesticide spray drifted beyond the intended target area. Users are required to minimize drift by using large spray droplets and taking other precautions.

V. Regulatory Information

In 1992, EPA registered (licensed for sale) the first pesticide products containing pelargonic acid. As of November 1999, four pesticide products registered as weed killers or blossom thinners contained this active ingredient.

The Food and Drug Administration (FDA) has approved pelargonic acid as a food additive, and as an ingredient in solutions used commercially to peel fruits and vegetables. These approvals indicate that FDA considers it safe for humans to eat food containing small amounts of pelargonic acid.

VI. Producer Information

Enforcer Products Inc.

PO Box 1060
Cartersville, GA 30120

Mycogen Corporation

5501 Oberlin Drive
San Diego, CA 92121

West Agro, Inc

501 Sante Fe
Kansas City, MO 64105

VII. Additional Contact Information

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